PATENT COOPERATION TREATY

From the INTERNATIONAL BUREAU

PCT

NOTIFICATION OF ELECTION

(PCT Rule 61.2)

To:

Assistant Commissioner for Patents
United States Patent and Trademark Office
Box PCT
Washington, D.C.20231
ETATS-UNIS D'AMERIQUE

in its capacity as elected Office

Date of mailing (day/month/year) 16 June 2000 (16.06.00)	
International application No. PCT/GB99/03485	**Applicant's or agent's file reference** P0920176WO
International filing date (day/month/year) 21 October 1999 (21.10.99)	**Priority date** (day/month/year) 23 October 1998 (23.10.98)
Applicant BEVERIDGE, Colin et al	

1. The designated Office is hereby notified of its election made:

[X] in the demand filed with the International Preliminary Examining Authority on:

11 May 2000 (11.05.00)

[ ] in a notice effecting later election filed with the International Bureau on:

2. The election [X] was

[ ] was not

made before the expiration of 19 months from the priority date or, where Rule 32 applies, within the time limit under Rule 32.2(b).

The International Bureau of WIPO **34, chemin des Colombettes** **1211 Geneva 20, Switzerland**	Authorized officer Juan Cruz
Facsimile No.: (41-22) 740.14.35	Telephone No.: (41-22) 338.83.38

Form PCT/IB/331 (July 1992)

GB9903485

PATENT COOPERATION TREATY

PCT

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference	FOR FURTHER ACTION	See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416)
P0920176WO		
International application No.	International filing date *(day/month/year)*	Priority date *(day/month/year)*
PCT/GB99/03485	21/10/1999	23/10/1998
International Patent Classification (IPC) or national classification and IPC D04H13/00		
Applicant DEXTER CORPORATION et al.		

1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.

2. This REPORT consists of a total of 6 sheets, including this cover sheet.

   ☒ This report is also accompanied by ANNEXES, i.e. sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).

   These annexes consist of a total of 7 sheets.

3. This report contains indications relating to the following items:

   - I ☒ Basis of the report
   - II ☐ Priority
   - III ☐ Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
   - IV ☐ Lack of unity of invention
   - V ☒ Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations suporting such statement
   - VI ☐ Certain documents cited
   - VII ☒ Certain defects in the international application
   - VIII ☐ Certain observations on the international application

Date of submission of the demand	Date of completion of this report
11/05/2000	12.12.2000
Name and mailing address of the international preliminary examining authority: European Patent Office D-80298 Munich Tel. +49 89 2399 - 0 Tx: 523656 epmu d Fax: +49 89 2399 - 4465	Authorized officer Serra-Verdaguer, J Telephone No. +49 89 2399 8198

Form PCT/IPEA/409 (cover sheet) (January 1994)

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No. PCT/GB99/03485

I. Basis of the report

1. This report has been drawn on the basis of *(substitute sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to the report since they do not contain amendments (Rules 70.16 and 70.17).)*:
Description, pages:

1,4-6,9-12	as originally filed			
2,3,7,8	as received on	15/11/2000	with letter of	14/11/2000

Claims, No.:

1-19	as received on	15/11/2000	with letter of	14/11/2000

2. With regard to the **language**, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.

   These elements were available or furnished to this Authority in the following language: , which is:

   ☐ the language of a translation furnished for the purposes of the international search (under Rule 23.1(b)).
   ☐ the language of publication of the international application (under Rule 48.3(b)).
   ☐ the language of a translation furnished for the purposes of international preliminary examination (under Rule 55.2 and/or 55.3).

3. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

   ☐ contained in the international application in written form.
   ☐ filed together with the international application in computer readable form.
   ☐ furnished subsequently to this Authority in written form.
   ☐ furnished subsequently to this Authority in computer readable form.
   ☐ The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.
   ☐ The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

4. The amendments have resulted in the cancellation of:

   ☐ the description, pages:
   ☒ the claims, Nos.: 17
   ☐ the drawings, sheets:

5. ☒ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed (Rule 70.2(c)):

   (Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.)
   see separate sheet

6. Additional observations, if necessary:

V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Yes:	Claims	8, 9, 10, 12, 13, 14, 18
	No:	Claims	1, 2, 3, 4, 5, 6, 7, 11, 15, 16, 17, 19
Inventive step (IS)	Yes:	Claims	
	No:	Claims	8, 9, 10, 12, 13, 14, 18
Industrial applicability (IA)	Yes:	Claims	1-19
	No:	Claims	

2. Citations and explanations
   see separate sheet

VII. Certain defects in the international application

The following defects in the form or contents of the international application have been noted:
see separate sheet

Re Item I

Basis of the report

1. Amended claims 1 and 15 filed with the letter dated 02.08.2000 introduce subject-matter which extends beyond the content of the application as filed, contrary to Article 34(2)(b) PCT, since no basis in the application as originally filed can be found for the following feature.

   a. the active-ingredient level in the treating agent amounts to **at least 3%** by weight of the solids in the untreated composite.

   Thus, this international preliminary examination report has been established as if the amendments done in claims 1 and 15 had not been made.

Re Item V

Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Reference is made to the following documents:

   D1: WO-A-96 41045
   D2: EP-A-0 557 678
   D3: EP-A-0 013 468
   D4: EP-A-0 540 024
   D5: WO-A-97 04173

2. Document D1 (see page 7, line 24-page 8, line 9; page 12, lines 24-30; page 14, line 22-page 15, line 2; page 25, line 27-page 26, line 2 and example 1) discloses with respect to claim 1, a nonwoven composite comprising a first fibrous layer in the form of a nonwoven web to which a second fibrous layer is joined by fibre entanglement. The nonwoven composite further comprises one textile-treating agent selected from silicones, derivatives of silicone and quaternary ammonium compounds.

   Hence, **the subject-matter of claim 1 is not novel** (Article 33(2) PCT).

3. Document D1 (see page 7, line 24-page 8, line 9; page 12, lines 24-30; page 14, line 22-page 15, line 2; page 25, line 27-page 26, line 2 and example 1) discloses with respect to claim 15, a process for the production of a nonwoven composite in which a second fibrous layer is hydroentangled into a first fibrous layer that is in the form of a nonwoven web, and the resultant structure is treated with a textile- treating agent selected from silicones, derivatives of silicones and quaternary ammonium compounds.

   Hence, **the subject-matter of claim 15 is not novel** (Article 33(2) PCT).

4. Document D4 (see page 1, lines 35-59, figure 1) discloses with respect to claim 17, an article comprising a moulded body, a decorative facing material and disposed between a nonwoven. The subject matter of claim 17 differs from that of Document D4 only in that the nonwoven is a nonwoven composite according to claim 1. However, as already argued above, Document D1 discloses a nonwoven composite according to claim 1. Thus, its inclusion in the article described in document D4 would be an obvious design possibility for the skilled person.

   Hence, **the subject-matter of claim 17 does not involve an inventive step** (Article 33(3) PCT).

5. Document D4 (see page 1, line 35-page 2, line 10, figure 1) discloses with respect to claim 19, a method of manufacturing an article in which a decorative facing material is placed within a mould space, a nonwoven material is located adjacent said material on the side remote from the show surface of the facing material and thermoplastic resin is introduced into the space defined by the mould wall and the surface of the nonwoven material remote from the decorative facing material. The subject matter of claim 19 differs from that of Document D4 only in that the nonwoven is a nonwoven composite according to claim 1. However, as already argued above with respect to claim 17, this feature cannot be seen as bringing any contribution to inventive step.

   Hence, **the subject-matter of claim 19 does not involve an inventive step** (Article 33(3) PCT).

6. Moreover, Document D1 (see page 7, line 24-page 8, line 9; page 12, lines 24-30; page 14, line 22-page 15, line 2; page 25, line 27-page 26, line 2 and example 1) is also novelty destroying for claims 2 to 7, 11 and 16 (Article 33(2) PCT).

7. Dependent claims 8, 9, 10, 12, 13, 14 and 18 do not appear to contain any additional features which, in combination with the features of any claim to which they refer, meet the requirements of the EPC with respect to inventive step (Article 33(3) PCT), the essential features thereof being already suggested by Documents D1 (see page 7, line 24-page 8, line 9; page 12, lines 24-30; page 14, line 22-page 15, line 2; page 25, line 27-page 26, line 2 and example 1), D2 (see page 4, lines 44-47; page 5, lines 1-3), D3 (see page 9, lines 7-31), D4 (see page 1, line 35-page 2, line 10) and D5 (page 1, lines 13-page 2, line 5).

Re Item VII

Certain defects in the international application

1. The unit "denier" employed on page 6 is not recognized in international practice, contrary to the requirements of Rule 10.1(d) PCT.

2. Contrary to the requirements of Rule 5.1(a)(ii) PCT, the relevant background art disclosed in document D1 is not mentioned in the description, nor is this document identified therein.

VDI Plastics in Automotive Engineering Conference, Manheim (March 1998); I. Adcock, "The pressure is on for a new mold", *Automotive & Transportation Interiors* (May 1997); and United States Patent 5 543 094 (Hara *et al.*). The teaching in these documents is incorporated herein by reference.

A particular problem in the one-step processes is that, because of the temperatures and pressures used, the decorative surface material can be degraded by being compressed (a textile will be flattened and lose its natural nap, for example) or the thermoplastic polymer used for the body of the form can exude into the decorative surface. If a foam layer is included in the article then this too can be degraded in the moulding process.

The Hara *et al.* patent suggests that these effects can be reduced or eliminated by providing a nonwoven lining between the thermoplastic form and the decorative surface, in this case a fabric. However, the use of needled or spunbonded nonwoven linings as exemplified in the Hara *et al.* patent may still not protect the decorative material adequately because of the inherent non-uniformity of nonwoven fabrics produced by these methods. The nature of the surface of these nonwovens can also create uneven flow patterns within the thermoplastic polymer from which the body of the form is moulded; the surface pattern inherent in these nonwovens can be imposed on the decorative layer.

Summary of the invention

In a first aspect, the present invention provides a nonwoven composite comprising a first fibrous layer in the form of a nonwoven web to which a second fibrous layer is joined by fibre entanglement and further comprising a textile-treating agent selected from silicones, derivatives of silicones and quaternary ammonium compounds.

In a second aspect, the present invention provides a process for the production of a nonwoven composite in which a second fibrous layer is hydroentangled into a first fibrous layer that is in the form of a nonwoven web, and the resultant structure is treated

with a textile-treating agent selected from silicones, derivatives of silicones and quaternary ammonium compounds.

In a third aspect, the present invention provides an article comprising a moulded body, a decorative facing material and, disposed between them, a nonwoven composite according to the said first aspect of the invention or a nonwoven composite prepared by a process according to the said second aspect of the invention.

In a fourth aspect, the present invention provides a method of manufacturing an article in which a decorative facing material is placed within a mould space, a nonwoven material is located adjacent said material on the side remote from the show surface of the facing material and thermoplastic resin is introduced into the space defined by the mould wall and the surface of the nonwoven material remote from the decorative facing material, wherein the nonwoven material is a composite according to the said first aspect of the invention or a nonwoven composite prepared by a process according to the said second aspect of the invention.

Description of exemplary embodiments of the invention

According to the invention, a nonwoven material is used as a lining between (i) a decorative surface or facing material (e.g. a fabric or film) and, if included, a foam layer, and (ii) the thermoplastic polymeric body of a moulded article. The decorative fabric, film or other facing material and, if included, the foam layer are introduced into the mould before the thermoplastic polymer and are thus laminated to the body of the article during the moulding process.

It has now been found that the inherent non-uniformity of the types of nonwovens used as linings in the prior art can be satisfactorily overcome by a process whereby cellulosic and/or other fibres are entangled into a nonwoven and by the nature of the process fill in the nonuniformities.

In certain preferred embodiments of the process a web of cellulosic fibres is hydroentangled into a base or substrate comprising, or consisting essentially of, a

As disclosed in EP-A-557,678, the total energy input provided by the fluid jets or streams may be calculated by the formula

$$E = 0.125\ YPG/bS$$

wherein Y = the number of orifices per linear inch of manifold width, P = the pressure in psig (pounds per square inch gauge) of liquid in the manifold, G = the volumetric flow in cubic feet per minute per orifice, S = the speed of the web material under the fluid jets or streams in feet per minute and b = the basis weight of the fabric produced in ounces per square yard. The total amount of energy, E, expended in treating the web is the sum of the individual energy values for each pass under each manifold, if there is more than one manifold and/or if there is more than one pass. Usually, the total energy input is from 0.07 to 0.4 horsepower-hours per pound (HPhr/lb). Typically, however, the total energy input is less than 0.3 HPhr/lb, e.g. is from 0.1 to 0.25 HPhr/lb.

Because the elements (webs or layers) of the complex are hydroentangled together other bonding is not required (although additional bonding is not precluded). The basic technology for hydroentanglement could, of course, be readily adapted for other arrangements. For example, it is possible to have fluid jets impinge on both sides of the composite: such an arrangement may be appropriate when the composite comprises a third fibrous layer adjacent the side of the first, base layer that is remote from the said second layer. In such a "sandwich" construction, the third layer may be similar or dissimilar to the second layer, depending on the desired overall properties of the resultant composite.

Either or each of the layers or webs may be single-ply or formed in two or more plies.

The hydroentangled composite, usually after it has been dried, is treated, in accordance with this invention, with a textile-treating agent (which agent may be hydrophilic). Suitable agents may be selected from the class of silicones and silicone derivatives (organosilicones), including siloxane polymers, e.g. poly(dimethyl-siloxanes) (PDMS) or poly(monomethylsiloxane); siloxane copolymers (which term includes graft copolymers and block copolymers), e.g. polyether-polysiloxane copolymers (dimethicone copolyols), such as PDMS – (polyalkylene oxide) copolymer

wherein the alkylene oxide is ethylene oxide, propylene oxide or a mixture thereof; and organofunctional siloxanes, e.g. aminofunctional siloxanes. Silicones and derivatives thereof useful as textile-treating agents are known (see, for example, J.C. Salamone (ed.), *Polymeric Materials Encyclopedia*, CRC Press (1996), volume 1, page 215 *et seq.* and volume 10, page 7706 *et seq.*). Silicones useful in the treatment of tissues are also disclosed in WO-A-97/04173, page 8, line 18, to page 9, line 15. Such agents are commercially available, for example the agent marketed as OSI Nuwet 300, or Dow Corning 2-8676 (hydroxy-terminated methylaminopropyl siloxane, 20% actives, emulsion), or Dow Corning 108 (aminoethylaminopropyl dimethyl siloxane).

Other suitable textile-treating agents include quaternary ammonium compounds, e.g. tetraalkylammonium halides, imidazoline quaternaries, amidoamine quaternaries and ester-quaternaries. Quaternary ammonium compounds and their use as fabric softeners are known (see, for example, Kirk-Othmer, *Encyclopedia of Chemical Technology*, Fourth Edition, Volume 20, Wiley-Interscience (1996), page 739 *et seq.*). Quaternary ammonium compounds useful in the treatment of tissues are also disclosed in WO-A-97/04173, page 3, line 22, to page 5, line 29. An example is Varisoft 3690 (methyl-1-oleyl amidoethyl-2-oleyl imidazolinium methylsulfate, aqueous composition, 90% actives). Other agents also come into consideration, e.g. nonionic substituted stearamides.

The treatment agent may comprise a mixture or blend of suitable compounds.

Usually, the treatment agent is applied in the form of an aqueous composition, e.g. an aqueous solution or emulsion. The treatment agent can, for example, be applied in-line by "padding" or "size press" techniques. Preferably, the actives level of the treatment agent applied to the nonwoven composite is from 3 to 7%, more preferably from 3.5 to 6.5% and most preferably from 4 to 5.5, by weight of the solids in the untreated composite. Nuwet 300, for example, may be applied at a concentration of, say, 80 ml/litre for 100% wet pick-up. After application of the treating agent the composite is usually dried.

CLAIMS

1. A nonwoven composite comprising a first fibrous layer in the form of a nonwoven web to which a second fibrous layer is joined by fibre entanglement and further comprising at least one textile-treating agent selected from silicones, derivatives of silicones and quaternary ammonium compounds.

2. A nonwoven composite according to claim 1 wherein the nonwoven web comprises polyester, polyolefin or polyamide fibres or a mixture of two or more such fibres.

3. A nonwoven composite according to claim 1 or 2 wherein the nonwoven web is formed by carding and subsequent needling or hydroentanglement.

4. A nonwoven composite according to claim 1 or 2 wherein the nonwoven web is a spunbonded material.

5. A nonwoven composite according to any of claims 1 to 4 wherein the basis weight of the nonwoven web is from 20 gm^{-2} to 150 gm^{-2}.

6. A nonwoven composite according to any of claims 1 to 5 wherein the second fibrous layer is formed from a pulp of cellulosic fibres.

7. A nonwoven composite according to claim 6 wherein the cellulosic fibres are wood fibres, vegetable fibres or a mixture thereof.

8. A nonwoven composite according to claim 7 which comprises, as vegetable fibres, abaca, jute, sisal or a mixture thereof.

9. A nonwoven composite according to any of claims 1 to 8 wherein the second fibrous layer is formed by an airlaying or wetlaying process.

10. A nonwoven composite according to any of claims 1 to 9 wherein the basis weight of the second fibrous layer is from 20 gm^{-2} to 70 gm^{-2}.

11. A nonwoven composite according to any of claims 1 to 10 wherein the textile-treating agent is a siloxane polymer, a siloxane copolymer, an organofunctional siloxane or a mixture of two or more of these.

12. A nonwoven composite according to any of claims 1 to 11 which comprises 3 to 7% by weight of silicone treating agent, as silicone, relative to the total dry weight of fibres.

13. A nonwoven composite according to claim 12 which comprises 3.5 to 6.5%, by weight of silicone treating agent, as silicone, relative to the total dry weight of fibres.

14. A nonwoven composite according to claim 13 which comprises 4 to 5.5%, by weight of silicone treating agent, as silicone, relative to the total dry weight of fibres.

15. A process for the production of a nonwoven composite in which a second fibrous layer is hydroentangled into a first fibrous layer that is in the form of a nonwoven web, and the resultant structure is treated with at least one textile-treating agent selected from silicones, derivatives of silicones and quaternary ammonium compounds.

16. A process according to claim 15 for the production of a nonwoven composite according to any of claims 2 to 14.

17. A process according to claim 15, substantially as hereinbefore described in any of Examples 1 to 5.

18. An article comprising a moulded body, a decorative facing material and, disposed between them, a nonwoven composite according to any of claims 1 to 14 or a nonwoven composite produced by a process according to claim 15, 16 or 17.

19. A moulded article, according to claim 18, wherein a foam layer is disposed between the decorative facing material and the nonwoven composite.

20. A method of manufacturing an article in which a decorative facing material is placed within a mould space, a nonwoven material is located adjacent said material on the side remote from the show surface of the facing material and thermoplastic resin is introduced into the space defined by the mould wall and the surface of the nonwoven material remote from the decorative facing material, wherein the nonwoven material is a composite according to any of claims 1 to 14 or a composite produced by a process according to claim 15, 16 or 17.

INTERNATIONAL SEARCH REPORT

International Application No
PCT/GB 99/03485

A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 D04H13/00 B32B5/26 B29C43/18 B32B27/12

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
IPC 7 D04H B32B B29C D06M B60R

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WO 96 41045 A (KIMBERLY CLARK CO) 19 December 1996 (1996-12-19) figures 1-3; example 1	1-3,5,6, 9-11,15, 16,18
Y	EP 0 557 678 A (DEXTER CORP) 1 September 1993 (1993-09-01) cited in the application page 3, line 36 -page 5, line 34	1-20
Y	EP 0 013 468 A (TEIJIN LTD) 23 July 1980 (1980-07-23) page 15, line 1 - line 12	1-20
A	GB 2 220 010 A (UNI CHARM CORP) 28 December 1989 (1989-12-28) cited in the application page 10, line 24 -page 11, line 2	1-20

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[X] Further documents are listed in the continuation of box C.

[X] Patent family members are listed in annex.

° Special categories of cited documents :

"A" document defining the general state of the art which is not considered to be of particular relevance

"E" earlier document but published on or after the international filing date

"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

"&" document member of the same patent family

Date of the actual completion of the international search	Date of mailing of the international search report
17 February 2000	02/03/2000

Name and mailing address of the ISA	Authorized officer
European Patent Office, P.B. 5818 Patentlaan 2 NL – 2280 HV Rijswijk Tel. (+31–70) 340–2040, Tx. 31 651 epo nl, Fax: (+31–70) 340–3016	Barathe, R

Form PCT/ISA/210 (second sheet) (July 1992)

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category °	Citation of document, with indication,where appropriate, of the relevant passages	Relevant to claim No.
A	US 5 801 107 A (EVERHART CHERIE HARTMAN ET AL) 1 September 1998 (1998-09-01) column 7, line 58 -column 8, line 8 column 9, line 54 - line 67	1-20
A	EP 0 540 024 A (SUMITOMO CHEMICAL CO) 5 May 1993 (1993-05-05) cited in the application page 2, line 49 -page 3, line 18	1-20
A	WO 97 04173 A (KIMBERLY CLARK CO) 6 February 1997 (1997-02-06) cited in the application the whole document	1-20
A	US 5 158 575 A (CZECH ANNA M) 27 October 1992 (1992-10-27) page 2, line 25 - line 42	1-20
A	WO 97 40778 A (KIMBERLY CLARK CO) 6 November 1997 (1997-11-06) claims 1,10,11,16	1-20
A	DATABASE WPI Section Ch, Week 9032 Derwent Publications Ltd., London, GB; Class A32, AN 90-242866 XP002096838 & JP 02 169248 A (TOYOBO KK), 29 June 1990 (1990-06-29) abstract	1-20

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No
PCT/GB 99/03485

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
WO 9641045 A	19-12-1996	AU 703499 B	25-03-1999
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		JP 5124052 A	21-05-1993
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		CN 1202946 A	23-12-1998
		EP 0864013 A	16-09-1998
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INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No
PCT/GB 99/03485

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
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